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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,625	05/29/2003	Stephen Appleyard	50055/1	8669

32642 7590 06/06/2005

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EXAMINER
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LAVILLA, MICHAEL E

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/019,625

Applicant(s)

APPLEYARD ET AL.

Examiner

Michael La Villa

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-8, 14, 15, 17, 18, 20, 23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) 20, 23 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 14, 15, 17, and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.
2. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.
3. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.
4. Group I, claim(s) 1-4, 6-8, 14, 15, 17, and 18, drawn to a method of making a mesophase pitch-based tape.
5. Group II, claim(s) 20, 23, and 25, drawn to a mesophase pitch-based tape.
6. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The subject matter of Claim 20 is anticipated by the prior art and hence cannot constitute a special technical feature. EP A 0 463 170 teaches a mesophase pitch-based tape formed by extrusion through a slit orifice. See page 4, lines 23-45 in EP A 0 463 170. The claim requires graphite basal planes parallel to a major surface of the tape. Such structure would be expected to be inherently obtained. It is noted that the articles of Claim 20 need not be obtained by the method of Claim 1, only obtainable by the method of Claim 1.
7. During a telephone conversation with Mr. Laurence on 17 May 2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-4, 6, 8, 14, 15, 17, and 18. Affirmation of this election must be made by applicant in replying to this Office action. Claims 20, 23, and 25 are withdrawn

from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Objections***

8. Claim 18 is objected to because of the following informalities: The word "resistance" has been misspelled. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:
10. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
11. Claims 1-4, 6-8, 14, 15, 17, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- I. Regarding Claim 1, it is unclear what is meant by the phrase "mesophase pitch-based tape." In what sense is the tape "based" on mesophase pitch? Does this mean that 50 weight percent or more of the tape is comprised of mesophase pitch?
- II. Regarding Claim 6, it is unclear what is meant by the phrase "subjected to an elevated temperature." Does this refer to any temperature greater than ambient temperature, room temperature, or some other temperature baseline? Does this refer to a temperature at least in excess of some minimum temperature?

***Allowable Subject Matter***

12. Neither the reviewed prior art nor prior art of record teaches the subject matter of the claimed method of Claims 1-4, 6-8, 14, 15, 17, and 18. Particularly, the claimed aspect ratio, draw ratio, and shear rate combination is not taught or suggested.

**CONCLUSION**

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Tuesday, Thursday, and alternating Fridays.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael La Villa  
30 May 2005

**MICHAEL E. LAVILLA PH.D.**  
**PRIMARY EXAMINER**